Assignment 1: A (DNA) String Processing Tool

Initially the program will tell the user what the program does.

Tells user there are 3 options and asks them to select.

Additional code to check if it is valid

Program assigns this selection to a variable to later be used in an if statement

Program then asks user what spacing they would like.

Additional code to check if it is valid

Program assigns this selection to a variable to later be used in an if statement

Program then asks user to input their DNA sequence, this is then converted to capitals since outputs are only done in capitals.

The program then begins to use the information provided.

The program uses an if statement to check which of the 3 conversion formulae to use.

In each of the conversion formula if statements is a spacing check, this checks if spacing is 0 if so then no spaces are added. If the spacing is not zero then the program checks how many are needed and adds them every x (variable is “spacing”) place.

The conversion formula then goes through a while loop, it runs through this loop for the length of the input string. The program checks each letter in the given string and outputs the corresponding letter for the conversion chosen.

System then displays the converted code, what the users input, the amount of errors, the input length and the error rate.